UNITED STATES PATENT AND TRADEMARK OFFICE

MN

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,651	01/14/2004	Achim Kraiss	13906-165001 / 2003P00822	3935

32864	7590	05/18/2007	

FISH & RICHARDSON, P.C.
PO BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER
SILVER, DAVID

ART UNIT	PAPER NUMBER
2128	

MAIL DATE	DELIVERY MODE
05/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 March 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>14 January 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail. Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 were originally presented for examination.

2. Claims 1-21 were rejected.

3. Claims 1-21 are currently pending in Instant Application.

4. The Instant Application is not currently in condition for allowance.

Priority

5. Priority is not claimed.

Response to Arguments

Response: Drawings Objection

6. **Background:**

Drawings were objected-to because "Figure 3 should be designated by legend --Prior Art-- because only that which is old is illustrated **(a computer system)**." (Previous Office Action (dated 9/7/06) section 3)

7. **Applicants argue:**

7.1 "Figure 3 and the corresponding description describe features not found in the prior art. For example, figure 3 "is a block diagram of one embodiment of the prediction engine 104 shown in FIG. 1 ." (See specification at page 9, lines 24-25). A prediction engine of the type described throughout Applicant's specification exists nowhere in the prior art, and is therefore novel. Figure 3 includes "memory 302 [that] stores information within the prediction engine 104," and is "a computer-readable medium" in one implementation. (See specification at page 10, lines 1-2). Figure 3 also includes a "storage device 304 [that] is capable of providing mass storage for the prediction engine 104," and is "a computer-readable medium" in one implementation. (See specification at page 10, lines 7-8)."

7.2 "Claim 21 is directed to a computer-readable medium having computer-executable instructions contained therein that perform a novel method. As described below, claim 21 is directed to patentable subject matter, and therefore Figure 3, by displaying a computer-readable medium that stores instructions that when executed perform a novel method, shows novel, non-obvious and useful

subject matter and does not show prior art."

8. **Examiner Response:**

8.1 New grounds of rejections, necessitated by Applicants' remarks, are presented in respective

section(s) below. See section 35 USC 102(b) Rejections.

8.2 Applicants argue that claim 21 discloses that which is illustrated in Fig 3. Applicants appear to be

arguing that Claim 21 is functionally equivalent to Fig 3 and vise versa. Thus, arguing that Fig. 3 is

novel because Claim 21 is allegedly novel. Fig 3 shows a processor, memory, storage device,

input/output device interconnected at a single point. In view of Applicants' newly presented

arguments attention is directed to a new grounds of rejection in view of a dictionary definition of

"Computer Hardware", which includes among other things, a processor, memory, input/output

device, and storage device. As such, Claim 21 is not drawn to a novel invention and Figure 3 should

b designated by legend --Prior Art--.

8.3 Objection is **maintained** because the Figure is drawn to prior-art.

Response: Claim Objections

9. **Background:**

Claims 5 and 6 were objected to under 37 CFR 1.75(c), as being of improper dependent form for

failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the

claim(s) in independent form. Claim 1 recites "a first set of input values" and "a second set of input

values". This inherently means the first set has at least two input values, and the second set of input

values.

10. **Applicants argue:**

"Amended claim 1 recites a "first input value set" and a "second input value set" to more particularly

point out that either or both of the input value sets may comprise a single input value. Applicant has

amended dependant claims 3-7 for consistency with amended claim 1." (Remarks: page 7 middle)

11. **Examiner Response:**

Applicants are thanked for amending the claims in order to overcome the Claim Objections.

Objections have been **withdrawn**.

Response: 35 U.S.C. §101

12. **Background:**

Claims 1-21 stand rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

13. **Applicants argue:**

13.1   Applicant submits that the amendment addresses the Office Action's concerns regarding non-statutory subject matter, and requests that the non-statutory subject matter rejections to claims 1-12 be removed.

13.2   "With regard to claims 13-21, the Office Action contended that the claims were directed to software per se. Applicant disagrees. While Applicant does not concede the correctness of the rejection, Applicant has nevertheless amended independent claims 13, 14 and 21 to advance prosecution and further clarify the useful, tangible, and concrete result.

13.3   "Also, claim 14 includes a "prediction engine," and Applicant's specification describes FIG. 3 as "one embodiment of the prediction engine 104 shown in FIG. 1 ." (See specification at page 9, lines 24-25). In the described implementation, "the prediction engine includes a processor 300, a memory 302, a storage device 204, and an input/output device 306." (See specification at page 9, lines 25-26). Thus, Applicant submits the specification includes sufficient definition that the product includes hardware elements with regard to claim 14.

13.4   "Also, claims 13 and 14 include an application system, and Applicant's specification describes that in an implementation, "the application system 102 may also include various engines and repositories used for collecting and storing information." (See specification at page 3, lines 14-16). A repository, at least, is a hardware element, and Applicant submits that claims 13 and 14 include sufficient hardware elements.

13.5   "Claim 21 is directed to a computer-readable medium having computer-executable instructions

for performing a method. Applicant's specification describes that in an implementation, "the memory 302 is a computer-readable medium." (See specification at page 10, lines 1-2). Applicant submits that claim 21 is directed to an appropriate medium." **(Remarks: page 8)**

14. **Examiner Response:**

14.1   Regarding subsection 1 above, the step of "providing the second prediction result to the application system" does not yield a result that is concrete, useful, and tangible final result. Furthermore, the claim is drawn to software code *per se*, where receiving an input, using a data mining model, saving data, are all software instructions. Thus the claim is drawn to non-statutory subject matter. Rejections of claims 1-12 are **maintained.**

14.2   Regarding subsection 2 above, arguments presented are not persuasive, see rationale provided in Examiner Response in section *supra*. The rejection of claim 13 is **maintained.**

14.3   Regarding subsection 3 above, the rejection of claim 14 and its dependents have been **withdrawn.**

14.4   Regarding subsection 4 above, the specification does not define "application system" with clarity, deliberateness and precision. For example, the term "may" is used in the quoted text. Therefore, it takes on its ordinary meaning in the art, a program. Rejection of claim 13 is **maintained.**

14.5   Regarding subsection 5 above, the term "compute-readable medium" is recited in the preamble and is therefore not given patentable weight. Further, the claim is drawn to software elements and instructions, *per se*. Rejections of claim 21 are **maintained.**

Response: 35 U.S.C. § 112, first paragraph

15. **Background:**

"The Office Action rejected claims 1-21 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Office Action contended that "application system" is not sufficiently described in the specification so as to reasonably convey to one skilled in the art that the inventors, at the time of filing, had possession of the claimed invention. Applicant disagrees." (Remarks: page 9)

16. **Applicants argue:**

"Applicant's specification as originally filed provides sufficient written description to comply with the written description requirement of 35 U.S.C. § 112. As to the Office Action's concern regarding "application system," Fig. 1 of Applicant's specification shows the application system 102 and the specification describes the application system at numerous locations.

"For example, at page 3, lines 11-14, an implementation is described where the "application system 102 includes various run-time applications, and that, in an implementation, "these applications are software applications running in a customer relationship management (CRM) environment, and may include customer interaction center or sales applications."

"The specification further describes an implementation where "the application system 102 may also include various engines and repositories used for collecting and storing information, such as customer or key performance indicator (KPI) information." (See specification at page 3, lines 14-16).

"Moreover, in an implementation, "[t]he application system 102 sends requests to the prediction engine 104 for executing prediction tasks," that "may include one or more input values that are used during task execution." (See specification at page 3, lines 16-18).

"In an implementation, "the application system 102 provides these values to the prediction engine 104 when they are available." (See specification at page 3, lines 20-21).

"Specific examples are described at Applicant's specification page 3, line 10 to page 4, line 7. Another example that includes a call-center agent using the application system is described from page 4, line 8 to page 5, line 13.

"As such, Applicant's specification as originally filed has sufficient written description of an "application system," and Applicant accordingly asks that the 35 U.S.C. § 112, first paragraph written description rejections of claims 1-21 be withdrawn." **(Remarks: page 9; emphasis added)**

17. **Examiner Response:**

Even evidenced by the Applicants' own citations the term "application system" is not defined with clarity, deliberateness, and precision. The term is used in the Specification with indefinite meanings

and vague "optional" features that may or may not be part of the system. Note exemplary added

emphasis (added by Examiner), which clarify the deficiencies. Applicants' arguments have been fully

considered but are unpersuasive.

The 35 USC 112, first paragraph rejection of claims 1-21 are **maintained**.

Response: 35 U.S.C. § 112, second paragraph

18. **Background:**

"The Office Action also rejected claim 21 under 35 U.S.C. § 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the

invention. Specifically, the Office Action noted that claim 21 lacks antecedent basis for the limitation

"the application system." (Remarks: page 10)

19. **Applicants argue:**

"Applicant has amended claim 21 to address the antecedent basis concern, and asks that the 35

U.S.C. § 112, second paragraph rejection of claim 21 be withdrawn." (Remarks: page 10)

20. **Examiner Response:**

The 35 USC 112, second paragraph rejections have been **withdrawn**.

Response: 35 U.S.C. § 102

21. **Background:**

"The Office Action rejected claims 1-11 and 13-21 under 35 U.S.C, § 102(e) as being anticipated by

U.S. Publication No. 2003/0043815 to Tinsley et al. ("Tinsley")."

22. **Applicants argue:**

"Tinsley does not disclose or suggest the elements of Applicant's amended claim 1. For example,

Tinsley fails to disclose or suggest a computer-implemented method that includes saving; state

information generated from a computation of a first prediction result and using a data mining model

along with the state information and a second input value set to compute a second prediction result,

as recited in claim 1. In particular, Applicant's claim 1 recites that saved state information generated

during computation of a first prediction result is used to compute a second prediction result, and

Tinsley fails to disclose or suggest at least this aspect of Applicant's claim 1." **(Remarks: page 10)**

"In contending that Tinsley anticipates Applicant's claim 1, the Office Action cited Tinsley's disclosure of periodically taking snapshots of traffic and processor usage as anticipating Applicant's first and second input data sets. (Office Action page 5). Also. the Office Action cited "previously achieved (sic) data," (Office Action page 5), as anticipating Applicant's "saving state information" claim 1 limitation, though Applicant believes that the Office Action was referring to Tinsley's disclosure of previously archived data."

"However, Tinsley's archived data is very different from the state information that is stored after being generated from the computation of the first prediction result as recited in Applicant's claim 1. Tinsley, in contrast, merely correlates new data with previously archived data for usage patterns. (Paragraph 0009). At most, Tinsley discloses archiving input value sets, but does not disclose or suggest storing state information of the type recited in Applicant's claim 1. Indeed, the Office Action has cited Tinsley's "snapshots of traffic" as anticipating Applicant's input value set claim limitations, and it is this same information that Tinsley discloses as being archived, such that later information may be correlated with previously archived data. (Paragraph 0040).

"Nowhere does Tinsley disclose or suggest saving state information generated during the computation of a first prediction result and later using the state information to compute a second prediction result.

"Claim 1 is also not obvious in view of Tinsley, either alone or in view of any other reference of record. Applicant's claim 1 method provides various advantages that are not possible with the structures disclosed by Tinsley, and are not even contemplated by Tinsley. For example, the saved state information of Applicant's claim 1 enables the second prediction result to be computed using a reduced number of computations because previously made computations need not be repeated. (See Applicant's specification, page 6, lines 15-19). As such, the method of Applicant's claim 1 may permit the generation of successive prediction output to be expedited in a way not possible using the structures disclosed by Tinsley, where only archiving input value sets is disclosed or suggested."

(Remarks: page 11)

23. **Examiner Response:**

23.1   Attention is drawn to paragraph [0009] of the Tinsley reference, which recites, in part:

"Implementations of the invention may include one or more of the following. **Predictive analysis** is used to configure to deliver QoS. The network fabric comprises one or more POPs and a gateway hub, wherein each POP send its current load status and QOS configuration to the gateway hub where **predictive analysis** is performed to handle load balancing of data streams to deliver consistent QoS for the entire network on the fly. The predicting means periodically takes snapshots of traffic and processor usage and **correlates the traffic and usage data with previously archived data** for **usage patterns** that are used to **predict the configuration** of the network to provide optimum QoS." (emphasis added)

The Tinsley reference discloses using data to perform prediction results. Such prediction results are calculated on a continuous basis based on user interaction with the system. As such, the past user interaction influences the past and current prediction results. From this, it is asserted that the most current prediction results are based on the past results. As such, it is asserted that there is functionally equivalent to a saving an intermediary prediction result and using additional input, and using the entire input of the past and the present. If fact, Applicants concede that Tinsley indeed performs this type of calculation.

The rejections are **maintained.**

24. **Background:**

The Office Action rejected claims 1, 12-14 and 21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Publication No. 2002/0083067 to Tamayo et al. ("Tamayo").

25. **Applicants argue:**

25.1   "[L]ike Tinsley, Tamayo discloses at most archiving input values. Nowhere does Tamayo disclose or suggest saving state information generated during the computation of a first prediction result and

later using the state information to compute a second prediction result. While **Tamayo discloses** increasing accuracy of **predictions using data collected in subsequent sessions**, (paragraph 0072), disclosure of simply collecting more data and **computing a new prediction** does not disclose or suggest the requirements of Applicant's claim 1 where stored state information generated during a computation of a first prediction result is used to compute a second prediction result.

25.2   "Claim 1 is also not obvious in view of Tamayo, either alone or in view of any other reference of record. Applicant's claim 1 method provides various advantages that are not possible with the structures disclosed by Tamayo, and are not even contemplated by Tamayo. For example, the saved state information of Applicant's claim 1 enables the second prediction result to be computed using a reduced number of computations because previously made computations need not be repeated. (See Applicant's specification, page 6, lilies 15-t g). As such, the method of Applicant's claim 1 may permit the generation of successive prediction output to be expedited in a way not possible using the structures disclosed by Tamayo, where only archiving input value sets is disclosed or suggested."

(Remarks: page 12-13)

26. **Examiner Response:**

Applicants' presents similar arguments as presented in the Tinsley reference. Applicants' arguments have been fully considered but are found unpersuasive for the reasons set-forth in "Examiner Response" section referring to the "Tinsley" rejection.

Claim Interpretation

27. Limitations drawn to allowing, enabling or making optional, a function's performance does not further limit a claim. This includes features that are "adapted to" or "operable to". See MPEP 2111.04. As such, any prior art not explicitly prohibiting the performance of the function inherently anticipates the limitation.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

28. Claims 1-13, and 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter.

28.1   In this instance, absent an explicit and deliberate definition in the specification that the product

includes an appropriate medium or hardware elements, the claims are directed to software, *per se*.

Note exemplary claims 13 and 21, which recite only software elements. Additionally, software, *per se*,

is not considered concrete (MPEP 2106).

> **MPEP 2106 recites, in part:**
> "...USPTO personnel shall review the claim to determine it produces a useful, tangible, and concrete result. In making this determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the *final* result achieved by the claimed invention is "useful, tangible, and concrete."

28.2   The steps of the method claims merely recite a software algorithm, per se, which, for example,

does not display, store, or otherwise provide a useful tangible output. Additionally, software alone is

non-statutory subject matter. Note exemplary claim 1 which only recites **software steps** and does

not produce a useful tangible and concrete final result. See MPEP 2106 [R-5] (partially recited

above). See section "Response: 35 U.S.C. §101" above.

Claim Rejections - 35 USC § 112

> The following is a quotation of the first paragraph of 35 U.S.C. 112:
> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the **written**

description requirement. The claim(s) contains subject matter which was not described in the

specification in such a way as to reasonably convey to one skilled in the relevant art that the

inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, what is an "application system"? Even evidenced by the Applicants' own citations

(Remarks dated 3/5/07): page 9) the term "application system" is not defined with clarity,

deliberateness, and precision. The term is used in the Specification with indefinite meanings and

vague "optional" features that may or may not be part of the system. Note exemplary added

emphasis (added by Examiner), which clarify the deficiencies. See section "Response: 35 U.S.C. §

112, first paragraph" above.

29. Claims not specifically mentioned are rejected by virtue of their dependency.

30. The Applicants are required to fix all other similar occurrences of the above-cited deficiencies.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

31. Claim 21 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wikipedia's "Computer hardware" (1/10/2003)

Per Applicants' arguments (detailed in section "Response: Drawings Objection" above), claim 21 drawn to Fig 3. As such, the Wikipedia references discloses all elements of Fig 3 and therefore discloses each and every element of claim 21. Mapping is not necessary as Fig 3 discloses a processor, memory, input/output devices, storage device which correlate to Wikipedia's CPU, Storage, Input/output, Memory.

32. Claims 1-11, and 13-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Tinsley **(Pub No 2003/0043815 A1).**

Tinsley discloses: 1. A computer-implemented method for providing prediction results to an application system during an interactive session with a user **(Fig 4 step 414 "user can view the content or interact with the content"; Fig 5 step between step 472 and 474 "user responds to any interactive selections"; text which further expands on the figures features)**, the method comprising:

receiving a first input value set from the application system **(para 27; para 9 input ... "takes snapshots of traffic")**;

using a data mining model along with the first input value set to compute a first prediction result

(para 9 predict ... "correlates the

traffic and usage data with previously archived data for usage patterns that are used

to predict the configuration");

saving state information generated from the computation of the first prediction result **(para 9**

the "previously achieved data" is inherently saved);

receiving a second input value set from the application system **(para 27; para 9 input ...**

"periodically takes snapshots of traffic" implies that the data is taken at least twice);

using the data mining model along with the state information and the second input value set to

compute a second prediction result prodiving the second prediction result to the application system

(para 9).

Tinsley discloses: 2. The computer-implemented method of claim 1, wherein the method comprises:

sending the first prediction result back to the application system **(para 9 application system**

... network; para 80); and

sending the second prediction result back to the application system **(para 9; 80).**

Tinsley discloses: 3. The computer-implemented method of claim 1, wherein

the second input value set includes both the first input value set and an additional input value set

(para 9; para 80), and

wherein the method comprises using the data mining model along with the state information and

the additional input value set to compute the second prediction result **(para 80: "In one embodiment,**

the system logs the user and stores the contextual feedback, applying any relative weights

assigned in the Semantic Map, and utilizing the Semantic Relationships table for indirect

assignments, an intermediate table should be employed for optimized resolution; the

assignment of relative weights is reflected in the active user state information.").

Tinsley discloses: 4. The computer-implemented method of claim 1, wherein the method comprises

receiving the first input value set from the application system before the second input value set are

available **(the first set of input values are the ones made from the previous prediction, they**

are therefore inherently received before the second set of input values).

Tinsley discloses: 5. The computer-implemented method of claim 1, wherein the first input value set includes at least two input values **(Fig 2, 3, 4, 5, 7, and texts which further expand on their features; para 80)**.

Tinsley discloses: 6. The computer-implemented method of claim 1, wherein the second input value set includes at least two input values **(Fig 2, 3, 4, 5, 7, and texts which further expand on their features; para 80)**.

Tinsley discloses: 7. The computer-implemented method of claim 1, wherein the method comprises:

receiving the first input value set from the application system during an interactive session with a customer **(Fig 4 step 414)**; and

receiving the second input value set from the application system during the interactive session with the customer **(Fig 4 step 414)**.

Tinsley discloses: 8. The computer-implemented method of claim 1, wherein the data mining model is a decision tree model **(para 73)**.

Tinsley discloses: 9. The computer-implemented method of claim 8, wherein the state information includes information about a particular node in the decision tree model.

Tinsley discloses: 10. The computer-implemented method of claim 1, wherein the data mining model is a Naive Bayes model **(para 72)**.

Tinsley discloses: 11. The computer-implemented method of claim 10, wherein the state information includes intermediate probability information **(para 72)**.

As per claim 13 and 21, note the rejection of claim 1 above. The Instant Claim is functionally equivalent to the above-rejected claim and therefore rejected under same prior-art teachings.

As per claims 14-20, note the rejection of claims 1-2, 4, 8-11 above, respectively. The Instant Claims are functionally equivalent to the above-rejected claims and therefore rejected under same prior-art teachings.

33. Claims 1, 12-14, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Tamayo **(US**

20020083067 A1).

Tamayo discloses: 1. A computer-implemented method for providing prediction results to an application

system during an interactive session with a user, the method comprising:

> receiving a first input value set from the application system **(para 42)**; using a data mining
>
> model along with the first input value set to compute a first prediction result **(para 42)**; saving
>
> state information generated from the computation of the first prediction result **(para 72)**;
>
> receiving a second input value set from the application system **(para 42)**; using the data mining
>
> model along with the state information and the second input value set to compute a second
>
> prediction result; and providing the second prediction result to the application system **(para**
>
> **72)**.

Tamayo discloses: 12. The computer-implemented method of claim 1, wherein the first and second

prediction results each specify a probability of customer churn **(para 241)**.

As per claims 13-14 and 21, note the rejection of claim 1 above. The Instant Claims are functionally

equivalent to the above-rejected claim and therefore rejected under same prior-art teachings.

Conclusion

34. All claims are rejected.

35. The Instant Application is not currently in condition for allowance.

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

> US 20020083067 discloses enterprise web mining system and method
>
> US 20030088565 discloses method and system for mining large data sets
>
> US 20040015386 discloses system and method for sequential decision making for customer

relationship management

> US 6836773 discloses enterprise web mining system and method
>
> US 20050102292 discloses enterprise web mining system and method

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Silver whose telephone number is (571) 272-8634. The examiner can normally be reached on Monday thru Friday, 10am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Silver
Patent Examiner
Art Unit 2128

KAMINI SHAH
SUPERVISORY PATENT EXAMINER